

REMARKS

Claims 1-63 are pending. Upon entry of this response, claims 1, 3, 4, 7-27, 29-33, 36-46, and 49-63 will be pending, claims 1, 16, 22, 25, 31, 33, 39, 41, 43, 46, 49-51, 56, and 61 having been amended and claims 2, 5, 6, 28, 34, 35, 47, and 48 canceled in the response.

The claim 1 amendment finds support in original claim 2 and the specification, page 68, ll. 21-30, for example. The claim 25 amendment finds support in original claim 28, for example. The claim 33 amendment finds support in original claim 35, for example. Amendments to claims 41 and 43 find support in their original claim language, original claim 47 and the specification, page 68, ll. 21-30, for example. Claim 46, 49-51, 56, and 61 amendments were directed to claim dependencies. Amendments to claims 16, 22, 31, 39, and 56 find support in their original claim language, for example. Accordingly, there are no issues of new matter.

Allowable Subject Matter

Claims 7 and 49 were objected to as being dependent upon a rejected base claim, but indicated as allowable if rewritten in independent form.

As discussed below, claims 1 and 41, from which claims 7 and 49 depend, respectively, are believed to be allowable. Hence, claims 7 and 49 are believed to be allowable as presently written. Withdrawal of the objections is therefore requested.

112, 2nd Paragraph, Rejections

Claims 16-22, 31, and 33-59 were rejected under 35 U.S.C. 112, 2nd paragraph, as allegedly being indefinite with respect to the term “obtainable.”

In accordance with the Examiner’s suggestion, the rejected term “obtainable” in claims 16, 22, 31, 39, 41, 43, and 56 has been replaced with “obtained.” Accordingly, the rejections are believed to have been overcome. Withdrawal of the rejections is therefore requested.

Double Patenting Rejections

Claims 25, 27, 33, and 34 were provisionally rejected on the alleged ground of nonstatutory double patenting over claims 2, 4, and 7 of co-pending Application No. 10/433,981. Applicants traverse the rejections.

Applicants submit that the claim 25 and 33 amendments render the rejections moot.

Withdrawal of the rejections is therefore requested.

102 Rejections

Sakaguchi

Claims 1-6, 22, and 23 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Sakaguchi (JP 9-316293). Claims 2, 5, and 6 have been canceled, rendering their rejections moot. Applicants traverse the remaining rejections.

Claim 1 as amended relates to a curable composition which contains an organic compound containing at least two carbon-carbon double bonds reactive with a SiH group in each molecule, a compound having at least two SiH groups in each molecule, a hydrosilylation catalyst, a silane coupling agent and/or an epoxy group-containing compound, and a silanol condensation catalyst, where the silanol condensation catalyst is a borate ester.

In contrast, Sakaguchi discloses a curable composition having a saturated hydrocarbon-based polymer bearing at least one alkenyl group capable of hydrosilylation in one molecule, a curing agent bearing at least two hydrosilyl groups in one molecule, a hydrosilylating catalyst, a silane coupling agent, and an organoaluminum compound and/or organotitanium compound. See Abstract. However, Sakaguchi does not disclose a borate ester as a silanol condensation catalyst, as in Applicants' claim 1.

Moreover, the Office Action indicates that claim 7, which is directed to borates as Applicants' silanol condensation catalyst, is allowable. See Office Action, page 6. As such, claim 1 as amended is allowable.

For at least these reasons, claim 1 and dependent claims 3, 4, 22, and 23 are not anticipated by Sakaguchi. Withdrawal of the rejections is therefore requested.

Dinallo

Claims 25, 27, 31, and 32 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Dinallo (US 4,943,601). Applicants traverse the rejections.

Claim 25 as amended relates to a curable composition which contains an organic compound containing at least two carbon-carbon double bonds reactive with a SiH group in each molecule, a compound having at least two SiH groups in each molecule, and a hydrosilylation catalyst, where a compound represented by general formula (II), as shown in the claim, is

contained as the organic compound and accounts for 20% by weight or more in the organic compound.

In contrast, Dinallo discloses a latent curable electronic coating composition stabilized against premature gelation having an olefinorganopolysiloxane, an organohydrogenpolysiloxane, a platinum catalyst, a combination of inhibiting agents comprises of an ethylenically unsaturated isocyanurate and a dialkyl acetylenedicarboxylate, and a silanol-containing dimethyl siloxane hydrolyzate. See claim 1. However, Dinallo does not disclose the curable composition of Applicants' claim 25.

For at least this reason, claim 25 and its dependent claims 27, 31, and 32 are not anticipated by Dinallo. Withdrawal of the rejections is therefore requested.

Kawamura

Claims 1-6 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Kawamura (US 5,684,110). Claims 2, 5, and 6 have been canceled, rendering their rejections moot. Applicants traverse the remaining rejections.

Claim 1 is described above.

Kawamura discloses a silicone rubber composition having a mixture comprising an alkoxy-substituted polyorganosiloxane and an alkenyl-substituted polyorganosiloxane, a polyorganosiloxane containing an average of at least two silicon-bonded hydrogen atoms per molecule, an organosilicon compound, a condensation reaction catalyst, and a platinum catalyst. See claim 1. However, Kawamura does not disclose a borate ester as a silanol condensation catalyst, as in Applicants' claim 1.

Moreover, as discussed above, claim 1 as amended is allowable for at least the same reasons as allowed claim 7.

For at least these reasons, claim 1 and its dependent claims 3 and 4 are not anticipated by Kawamura. Withdrawal of the rejections is therefore requested.

Ouchi

Claims 1-6, 8-10, 12, 13, 16, 17, 20, 22-25, 27-29, 31-37, 39-42, 46-48, 50, 51, 53, 54, 56-59, and 63 were rejected under 35 U.S.C. 102(a) as allegedly being anticipated by Ouchi (WO 02/053648). Claims 2, 5, 6, 28, 34, 35, 47, and 48 have been canceled, rendering their

rejections moot. Applicants traverse the remaining rejections.

Submitted herewith are certified English translations of priority Japanese applications JP 2002-125947 ("JP '947"), filed April 26, 2002, and JP 2002-133412 ("JP '412"), filed May 9, 2002. As indicated in the Office Action, the filing dates of these applications precede the effective prior art date of Ouchi (WO 02/053648). See Office Action, pages 4-5.

Claims 1 and 25 are described above.

Claim 33 as amended relates to a curable composition which contains an organic compound containing at least two carbon-carbon double bonds reactive with a SiH group in each molecule, a compound having at least two SiH groups in each molecule, and a hydrosilylation catalyst, where the compound having at least two SiH groups contains a reaction product from 1,3,5,7-tetramethylcyclotetrasiloxane and diallyl monoglycidyl isocyanurate, and/or a reaction product from 1,3,5,7-tetramethylcyclotetrasiloxane and monoallyl diglycidyl isocyanurate.

Claim 41 as amended relates to a light-emitting diode which comprises a light emitting element, a substrate on the top surface of which is formed an external electrode to be disposed with the light emitting element, and a sealing member disposed adjacently onto the substrate, where the contact surface between the electrode and the sealing member is 50 to 90% when the contact surface between the substrate and the sealing member is set at 100%. The substrate is a curing product obtained from a curable composition containing an organic compound containing at least two carbon-carbon double bonds reactive with SiH group in each molecule, a compound having at least two SiH groups in each molecule, a hydrosilylation catalyst, a silane coupling agent and/or an epoxy group-containing compound, and a silanol condensation catalyst, where the silanol condensation catalyst is a borate ester.

In contrast, Ouchi discloses a curing agent (B1) having at least two SiH groups in each molecule, which is obtainable by subjecting an aliphatic organic compound (α 1) having at least two carbon-carbon double bonds reactive with a SiH group in each molecule and an acyclic and/or cyclic polyorganosiloxane (β 1) having at least two SiH groups in each molecule to hydrosilylation reaction. See Abstract. Ouchi further discloses a curing agent (B2) having at least two SiH groups in each molecule, which is obtainable by subjecting an organic compound (α 2) represented by formula (I), as shown in Ouchi, and a cyclic polyorganosiloxane (β 2) having at least two SiH groups in each molecule to hydrosilylation reaction. See *id.* Ouchi further discloses a curable composition containing an organic compound having at least two carbon-

carbon double bonds reactive with a SiH group in each molecule, the above-described curing agent (B1) or the above-described curing agent (B2), and a hydrosilylation catalyst. See claims 3 and 4. However, Ouchi does not disclose a borate ester as a silanol condensation catalyst, as in Applicants' claims 1 and 41. Neither does Ouchi disclose the composition of Applicants' claim 25. Ouchi also does not disclose a compound having the reaction product(s), as in Applicants' claim 33.

Moreover, the Office Action indicates that claims 7 and 49, which are directed to borates as Applicants' silanol condensation catalyst, are allowable. See Office Action, page 6. As such, claims 1 and 41 as amended are allowable.

Furthermore, for the claims whose subject matter is disclosed by priority applications JP '947 and JP '412, Ouchi is disqualified as prior art.

For at least these reasons, claims 1, 3, 4, 8-10, 12, 13, 16, 17, 20, 22-25, 27, 29, 31-33, 36, 37, 39-42, 46, 50, 51, 53, 54, 56-59, and 63 are not anticipated by Ouchi. Withdrawal of the rejections is therefore requested.

103 Rejections

Claims 11, 14, 15, 18, 19, 21, 26, 30, 38, 43-45, 52, 55, and 60-62 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Ouchi. Applicants traverse the rejections.

Claims 1, 25, 33, and 41 are described above.

Claim 43 as amended relates to a light-emitting diode which comprises a light emitting element, a package comprising an aperture having a bottom surface to be disposed with the light emitting element and sidewalls, and a sealing member for sealing the aperture, where the package is formed of a molding resin by a monolithic process with one end of the external electrode exposed on the aperture bottom and the area of the external electrode on the aperture bottom is 50 to 90% when the surface area of the aperture bottom is set at 100%. The sealing member is a curing product obtained from a curable composition containing an organic compound containing at least two carbon-carbon double bonds reactive with SiH group in each molecule, a compound having at least two SiH groups in each molecule, a hydrosilylation catalyst, a silane coupling agent and/or an epoxy group-containing compound, and a silanol condensation catalyst, where the silanol condensation catalyst is a borate ester.

As discussed above, Ouchi does not disclose the subject matter of Applicants' claims 1,

25, 33 and 41. Ouchi also does not disclose a borate ester as a silanol condensation catalyst, as in Applicants' claim 43. Moreover, there is neither teaching nor suggestion in Ouchi to modify its curable composition to provide that of Applicants' claims.

Furthermore, Applicants have discovered that the curable composition of an embodiment of the present invention has excellent adhesive properties, high transparency and high toughness, with borate ester as the component (E). Measurement Examples 4-6 in the present specification show these excellent effects. In Examples 7-10, cured products are obtained by curing curable compositions which use the borate ester as the component (E); and in Example 1, a cured product is obtained by curing a curable composition which does not use the borate ester as the component (E). As the results, the cured products in Examples 7-10 have higher tensile strength and elongation and have smaller changes in the light transmittance at high temperatures than the cured product in Example 1.

Submitted herewith is a Declaration under Rule 1.132 by Mr. Masahito Ide.

Applicants have discovered excellent effects, as shown in Experiment 1 in the Declaration. Namely, the cured product of a curable composition, which has a compound (II) in an amount of 20% by weight or more in the component (A), has higher strength and elongation as well as higher toughness than the cured product of a curable composition which does not have a compound (II) in an amount of 20% by weight or more in the component (A).

Applicants have further discovered excellent effects, as shown in Experiment 2 in the Declaration. Namely, the cured product of a curable composition, in which the component (B) contains a reaction product from 1,3,5,7-tetramethylcyclotetrasiloxane and diallyl monoglycidyl isocyanurate, and/or a reaction product from 1,3,5,7-tetramethylcyclotetrasiloxane and monoallyl diglycidyl isocyanurate, has higher strength and elongation as well as higher toughness than the cured product of a curable composition which does not have the above reaction product(s) in the component (B).

The sealing member of claims 41-63 obtained from a curable composition as describe above has these excellent effects.

Also, for the claims whose subject matter is disclosed by priority applications JP '947 and JP '412, Ouchi is disqualified as prior art.

For at least these reasons, claims 11, 14, 15, 18, 19, 31-26, 30-33, 36-38, 43-45, 52, 55, and 60-62 are patentable over Ouchi. Withdrawal of the rejections is therefore requested.

CONCLUSION

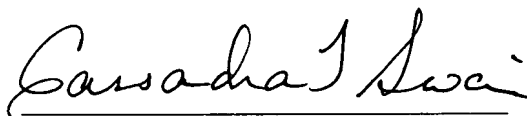
The claims are believed to be allowable. An early and favorable action to that effect is respectfully requested.

The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter in connection with this application.

The Office is hereby authorized to charge any fees under 37 C.F.R. 1.16 and 1.17 to the Kenyon & Kenyon Deposit Account No. 11-0600.

Respectfully submitted,

Date: June 21, 2007

A handwritten signature in cursive script, reading "Cassandra T. Swain".

Cassandra T. Swain, Ph.D.
(Reg. No. 48,361)

KENYON & KENYON LLP
1500 K Street NW
Washington, DC 20005
Telephone: 202-220-4200
Facsimile: 202-220-4201